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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,728	12/17/2001	Jean-Christophe Fidalgo	032326-185	5560

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EXAMINER

TAYLOR, APRIL ALICIA

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/009,728	Applicant(s) FIDALGO ET AL.	
	Examiner April A. Taylor	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/17/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the Preliminary Amendment filed 17 December 2001.

Claim Objections

2. Claims 1, 15, 18, and 20-22 are objected to because of the following informalities:

Re claims 1 and 20-22: The addition of the term "type" to an otherwise definite expression (e.g., the smart card) extends the scope of the expression so as to render it indefinite. Appropriate clarification and correction is required to alleviate the indefiniteness of the language "the smart card type". See M.P.E.P. § 2173.05(b).

Re claim 15: Substitute "it" with – the support film – (see line 3).

Re claim 18: Substitute "it" with – the support film – (see line 1).

Re claim 21: The examiner is not sure if claim 21 should depend on claim 1 or claim 19.

Re claim 21: It is unclear to the examiner to what the term "its" refers to (see line 1, page 8).

Re claim 22: Substitute "it" with – the substrate – (see line 8).

Re claim 27: Substitute "CU" with – Cu – (see line 2).

Appropriate correction is required.

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When

claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 28 has been renumbered 27.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 6, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 11, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Launay et al (US 5,647,122).

Re claims 1-4, 19, 20, 22, 23, 25-27: Launay et al teaches a method of manufacturing an integrated circuit card comprising a micromodule including a support film carrying a metallisation grid, and an integrated circuit chip placed in an attachment area and connected to the metallisation grid, the method comprising the steps of producing a metallisation grid on the support film of the micromodule; deforming the support film so that at least the attachment area is at a lower level with respect to the plane of the metallisation grid; manufacturing chip cards on a reel and/or in line; wherein the metallisation grid is produced by a non-electrolytic method; and including deposition of a metallisation grid initiator by an additive method, in the form of a deposition of at least one metallisation initiator according to predefined patterns corresponding to the surfaces of the metallisation grid, by pad printing, followed by non-electrolytic fixing of at least one metal of Cu, Ni and/or Au, catalysed by the initiator on the areas in which it is present. (See col. 3, line 18 to col. 7, line 55)

Re claims 5 and 24: Launay et al teaches wherein the metallisation initiator is chosen from amongst the catalytic materials based on palladium used for the metallisation of polymer substrates (see col. 3, line 18 to col. 7, line 55).

Re claim 6: Launay et al teaches wherein the metallisation initiator consists essentially of a film-forming agent, an additive conferring appropriate surface activity, an

ionic and/or colloidal noble metal, or a covalent or complex compound thereof with organic ligands (see col. 3, line 18 to col. 7, line 55).

Re claim 7: Launay et al teaches activating of the initiator, by insolation under UV radiation, and a drying step (see col. 3, line 18 to col. 7, line 55).

Re claim 8: Launay et al teaches impregnating of the strip directly or subsequently in a bath of a salt of the metal chosen for the metallisation (see col. 3, line 18 to col. 7, line 55).

Re claim 9: Launay et al further teaches a subsequent step of electrolytic deposition of an additional layer of metal, comprising at least one of Cu, Ni, Au or Pd, on the same areas of the support film as those which received the metallisation (see col. 3, line 18 to col. 7, line 55).

Re claim 10: Launay et al teaches a non-electrolytic deposition of at least one metal, and the production of the metallisation according to predefined patterns, by a subtractive method according to an image corresponding to the metallisation grid by photolithography (see col. 3, line 18 to col. 7, line 55).

Re claim 11: Launay et al teaches a step of applying, to the support film, a fine layer of at least one metal of Cu, Ni or Au, by means of a vacuum deposition technique (see col. 3, line 18 to col. 7, line 55).

Re claim 12: Launay et al teaches wherein a mechanically cut metallic grid is laminated on a support film (see col. 3, line 18 to col. 7, line 55).

Re claim 13: Launay et al teaches wherein the photolithography includes the steps of: depositing a layer of photosensitive resin on the metal, insolation through a

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mask or film, development of the resin, chemical etching of the material in the areas not protected by resin, and removal of the photosensitive resin (see col. 3, line 18 to col. 7, line 55).

Re claim 14: Launay et al teaches wherein, either before or after the implementation of the photolithography, performing an electrolytic deposition of a metallic coating of Ni + Pd (see col. 3, line 18 to col. 7, line 55).

Re claim 15 Launay et al teaches fixing and connecting the chip before the deformation of the dielectric support film, and then deforming the support film by pressing the support film into a cavity in the card body, with a punch having a recess (see col. 3, line 18 to col. 7, line 55).

Re claim 16: Launay et al teaches connecting the chip after deformation of the support film (see col. 3, line 18 to col. 7, line 55).

Re claim 17: Launay et al teaches wherein the support film is pressed and bonded by a punch in a recess or cavity formed in advance in a card body, and the chip is then connected whilst the film is fixed in the recess (see col. 3, line 18 to col. 7, line 55).

Re claims 18, 21, and 22: Launay et al teaches wherein, to deform the film, the support film is placed in an impression in a suitable mould and pressed against an internal wall and, after introduction of the material into the cavity, the support film is deformed by the pressure of the material against a punch having a shape complementary to that of a recess to be formed and/or by the movement of the punch (see col. 3, line 18 to col. 7, line 55).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Steffen (US 6,259,022) discloses a chip card micromodule as a surface-mount device; Gloton et al (US 5,569,879) discloses an integrated circuit micromodule; and Launay et al (US 5,850,690) discloses a method of manufacturing an integrated circuit card.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to April A. Taylor whose telephone number is (571) 272-2403. The examiner can normally be reached on Monday - Friday from 6:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [april.taylor@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the official Gazette of the Patent and

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Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


April Taylor
05 April 5, 2004

